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10/585,205

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EXAMINER

CANTELMO, GREGG

ART UNIT

PAPER NUMBER

1795

NOTIFICATION DATE

DELIVERY MODE

05/03/2010

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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| | | | |
|------------------------------|--------------------------------------|--------------------------------------|--|
| Office Action Summary | Application No. 10/585,205 | Applicant(s) SOTOWA ET AL. | |
| | Examiner Gregg Cantelmo | Art Unit 1795 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-37 is/are pending in the application.
4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☐ Claim(s) ____ is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☒ Claim(s) 1-37 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Election/Restrictions

Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 CFR 1.499, applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted.

Group I, claim(s) 1-21, drawn to a mixture of carbon, SBR and carbon fiber.

Group II, claim(s) 22-29, drawn to a method of producing a composition for forming an electrode material.

Group III, claim(s) 30-32, drawn to a composition for forming an electrode material.

Group IV, claims 33-34, drawn to a negative electrode composition and current collector.

Group V, claim(s) 35-37, drawn to a lithium battery.

The groups of inventions listed above do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons:

According to MPEP § 1850:

An international application should relate to only one invention or, if there is more than one invention, the inclusion of those inventions in one international application is only permitted if all inventions are so linked as to form a single general inventive concept (PCT Rule 13.1). With respect to a group of inventions claimed in an international application, unity of invention exists only when there is a technical relationship among the claimed inventions involving one or more of the same or

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corresponding special technical features. unity of invention exists only when there is a technical relationship among the claimed inventions involving one or more special technical features. The term "special technical features" is defined as meaning those technical features that define a contribution which each of the inventions considered as a whole, makes over the prior art. Lack of unity can be established "a posteriori" in light of prior art wherein the prior art teaches that some of the claimed inventions lack recitation of a common special technical feature. According to the corresponding ISR, JP 11-176442 is held to teach the invention of at least claim 1. Thus claim 1 lacks a special technical feature and the claims lack a common special technical feature. Therefore lack of unity of invention exists and restriction is proper.

Upon Election of Group I, the following species requirement is presented:

This application contains claims directed to more than one species of the generic invention. These species are deemed to lack unity of invention because they are not so linked as to form a single general inventive concept under PCT Rule 13.1.

The species are as follows:

Claim 2, wherein the technical feature therein is directed to the SBR particle size;

Claim 3, wherein the technical feature therein is directed to the amount of carbon fiber and SBR on the basis of the total amount of active substance, binder and carbon fiber;

Claims 4-6, wherein the technical feature therein is directed to the thickener;

Claim 7, wherein the technical feature therein is directed to the material having a specific resistance;

Claims 8 and 11, wherein the technical feature therein is directed to the carbon fiber being graphite;

Claim 9, wherein the technical feature therein is directed to the carbon fiber being graphite and having an oxygen containing functional group attached thereto;

Claim 10, wherein the technical feature therein is directed to the carbon fiber containing boron;

Claim 12, wherein the technical feature therein is directed to the carbon fiber having a hollow space;

Claim 13, wherein the technical feature therein is directed to a branched carbon fiber;

Claim 14, wherein the technical feature therein is directed to the active substance further containing Si;

Claims 15 and 21, wherein the technical feature therein is directed to the active substance being a non-graphite carbon material;

Claim 16, wherein the technical feature therein is directed to the carbonaceous particles having initial properties;

Claims 17, 18 and 20, wherein the technical feature therein is directed to the active substance containing graphite in an amount of 50% mass or more;

Claim 19, wherein the technical feature therein is directed to the active substance is in the form of particles having a particular mass amount of graphite particles having particular initial properties.

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Applicant is required, in reply to this action, to elect a single species to which the claims shall be restricted if no generic claim is finally held to be allowable. The reply must also identify the claims readable on the elected species, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered non-responsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise require all the limitations of an allowed generic claim. Currently, the following claim(s) are generic: claim 1

The claims are deemed to correspond to the species listed above in the following manner:

Claim 2, wherein the technical feature therein is directed to the SBR particle size;

Claim 3, wherein the technical feature therein is directed to the amount of carbon fiber and SBR on the basis of the total amount of active substance, binder and carbon fiber;

Claims 4-6, wherein the technical feature therein is directed to the thickener;

Claim 7, wherein the technical feature therein is directed to the material having a specific resistance;

Claims 8 and 11, wherein the technical feature therein is directed to the carbon fiber being graphite;

Claim 9, wherein the technical feature therein is directed to the carbon fiber being graphite and having an oxygen containing functional group attached thereto;

Claim 10, wherein the technical feature therein is directed to the carbon fiber containing boron;

Claim 12, wherein the technical feature therein is directed to the carbon fiber having a hollow space;

Claim 13, wherein the technical feature therein is directed to a branched carbon fiber;

Claim 14, wherein the technical feature therein is directed to the active substance further containing Si;

Claims 15 and 21, wherein the technical feature therein is directed to the active substance being a non-graphite carbon material;

Claim 16, wherein the technical feature therein is directed to the carbonaceous particles having initial properties;

Claims 17, 18 and 20, wherein the technical feature therein is directed to the active substance containing graphite in an amount of 50% mass or more;

Claim 19, wherein the technical feature therein is directed to the active substance is in the form of particles having a particular mass amount of graphite particles having particular initial properties.

The following claim(s) are generic: Claim 1.

REQUIREMENT FOR UNITY OF INVENTION

As provided in 37 CFR 1.475(a), a national stage application shall relate to one invention only or to a group of inventions so linked as to form a single general inventive concept ("requirement of unity of invention"). Where a group of inventions is claimed in

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a national stage application, the requirement of unity of invention shall be fulfilled only when there is a technical relationship among those inventions involving one or more of the same or corresponding special technical features. The expression "special technical features" shall mean those technical features that define a contribution which each of the claimed inventions, considered as a whole, makes over the prior art.

The determination whether a group of inventions is so linked as to form a single general inventive concept shall be made without regard to whether the inventions are claimed in separate claims or as alternatives within a single claim. See 37 CFR 1.475(e).

WHEN CLAIMS ARE DIRECTED TO MULTIPLE CATEGORIES OF INVENTIONS

As provided in 37 CFR 1.475(b), a national stage application containing claims to different categories of invention will be considered to have unity of invention if the claims are drawn only to one of the following combinations of categories:

(1) A product and a process specially adapted for the manufacture of said product; or

(2) A product and process of use of said product; or

(3) A product, a process specially adapted for the manufacture of the said product, and a use of the said product; or

(4) A process and an apparatus or means specifically designed for carrying out the said process; or

(5) A product, a process specially adapted for the manufacture of the said product, and an apparatus or means specifically designed for carrying out the said process.

Otherwise, unity of invention might not be present. See 37 CFR 1.475(c).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gregg Cantelmo whose telephone number is 571-272-1283. The examiner can normally be reached on Monday to Thursday, 8:30-6:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Pat Ryan can be reached on 571-272-1292. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Gregg Cantelmo/
Primary Examiner, Art Unit 1795